



SEQUENCE LISTING

B1
<110> Magdelena, J
Supply, P
Locht, C

<120> FRAGMENTS OF NUCLEIC ACIDS SPECIFIC TO MYCOBACTERIA
WHICH ARE MEMBERS OF THE M. TUBERCULOSIS COMPLEX AND
THEIR APPLICATIONS FOR THE DETECTION AND THE
DIFFERENTIAL DIAGNOSIS OF MEMBERS OF THE M. TUBERC

<130> 408.014-CON

<140> 10/086,206
<141> 2002-02-28

<150> 09/242,588
<151> 1999-05-20

<150> PCT/FR97/01483
<151> 1997-08-12

<150> FR 96/10277
<151> 1996-08-19

<160> 21

<170> PatentIn Ver. 2.1

<210> 1
<211> 77
<212> DNA
<213> Mycobacterium tuberculosis

<400> 1
atgacctgcg ccgacgacga tgcagagcgt agcgatgagg tgggggcacc acccgcttgc 60
gggggagagt ggcgctg 77

<210> 2
<211> 53
<212> DNA
<213> Mycobacterium tuberculosis

<400> 2
atgacctgcg ccgacgacga tgcagagcgt agcgatgagg aggagtggcg ctg 53

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<211> 52
<212> DNA
<213> *Mycobacterium leprae*

<400> 3
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52

<210> 4
<211> 19
<212> DNA
<213> *Mycobacterium tuberculosis*

<400> 4
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19

<210> 5
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<212> DNA
<213> *Mycobacterium tuberculosis*

<400> 5
gcgcagcaga aacgtcagc

19

<210> 6
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<212> DNA
<213> *Mycobacterium bovis*

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cgaggagtcg ctggccgatc cgc

23

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22

<210> 8
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<212> DNA

<213> *Mycobacterium bovis*

<400> 8

tggcgttagtg tgtgacttgt c

21

<210> 9

<211> 21

<212> DNA

<213> *Mycobacterium bovis*

<400> 9

gaccagacag tcgccaagg t

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<210> 10

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<212> DNA

<213> *Mycobacterium tuberculosis*

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aaacacgtcg cggctaatca

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<210> 11

<211> 21

<212> DNA

<213> *Mycobacterium tuberculosis*

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21

<210> 12

<211> 3208

<212> DNA

<213> *Mycobacterium bovis*

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gtggc当地 gggatc当地 acgggtt cgc当地 agatgtt gcaatgc当地 gtc当地 acgctga tggcc当地 ctgggg 480
cc当地 cgggtg gtggacaccc atc当地 cgc当地 acgt tgc当地 tacctc aacgaacggg ccaaagagct 540

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<211> 225
<212> DNA
<213> *Mycobacterium tuberculosis*

<400> 13
gctgagccga tgacctgcgc cgacgacgat gcagagcgta gcgatgaggt gggggcacca 60
cccgcttgcg ggggagagtg gcgctgatga cctgcgccga cgacgatgca gagcgttagcg 120
atgaggtggg ggcaccaccc gcttgccggg gagagtggcg ctgatgacct gcccacg 180
cgatgcagag cgtagcgatg aggaggagtg gcgctgatga ccagt 225

<210> 14
<211> 25
<212> PRT
<213> *Mycobacterium bovis* BCG

<220>
<223> Translation of ORF nucleotides 1525-1602 of SEQ ID
NO:12.

<400> 14
Met Thr Cys Ala Asp Asp Asp Ala Glu Arg Ser Asp Glu Val Gly Ala
1 5 10 15

Pro Pro Ala Cys Gly Gly Glu Trp Arg
20 25

<210> 15
<211> 25
<212> PRT
<213> *Mycobacterium bovis* BCG

<220>
<223> Translation of ORF nucleotides 1602-1679 of SEQ ID
NO:12.

<400> 15
Met Thr Cys Ala Asp Asp Asp Ala Glu Arg Ser Asp Glu Val Gly Ala
1 5 10 15

Pro Pro Ala Cys Gly Gly Glu Trp Arg
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<210> 16
<211> 25
<212> PRT

<213> *Mycobacterium tuberculosis*

<220>

<223> Translation of ORF nucleotides 10-87 of SEQ ID
NO:13.

<400> 16

Met Thr Cys Ala Asp Asp Asp Ala Glu Arg Ser Asp Glu Val Gly Ala
1 5 10 15

Pro Pro Ala Cys Gly Gly Glu Trp Arg
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<210> 17

<211> 25

<212> PRT

<213> *Mycobacterium tuberculosis*

<220>

<223> Translation of ORF nucleotides 87-164 of SEQ ID
NO:13.

<400> 17

Met Thr Cys Ala Asp Asp Asp Ala Glu Arg Ser Asp Glu Val Gly Ala
1 5 10 15

Pro Pro Ala Cys Gly Gly Glu Trp Arg
20 25

<210> 18

<211> 17

<212> PRT

<213> *Mycobacterium tuberculosis*

<220>

<223> Translation of ORF nucleotides 164-217 of SEQ ID
NO:13.

<400> 18

Met Thr Cys Ala Asp Asp Asp Ala Glu Arg Ser Asp Glu Glu Trp
1 5 10 15

Arg

<210> 19
<211> 39
<212> PRT
<213> *Mycobacterium bovis*

<220>
<223> Translation of nucleotides 3-119 of SEQ ID NO:12,
partial PgmY amino acid sequence.

<400> 19
Ile Pro Leu Arg Tyr Asp Leu Asp Ser Ala Met Arg Pro Leu Val Arg
1 5 10 15

Gly Gly Thr Tyr Leu Asp Pro Glu Ala Ala Ala Ala Gly Ala Ala Ala
20 25 30

Val Ala Gly Gln Gly Arg Gly
35

<210> 20
<211> 410
<212> PRT
<213> *Mycobacterium bovis*

<220>
<223> Translation of nucleotides 296-1528 of SEQ ID
NO:12, SenX3 amino acid sequence.

<400> 20
Met Thr Val Phe Ser Ala Leu Leu Leu Ala Gly Val Leu Ser Ala Leu
1 5 10 15

Ala Leu Ala Val Gly Gly Ala Val Gly Met Arg Leu Thr Ser Arg Val
20 25 30

Val Glu Gln Arg Gln Arg Val Ala Thr Glu Trp Ser Gly Ile Thr Val
35 40 45

Ser Gln Met Leu Gln Cys Ile Val Thr Leu Met Pro Leu Gly Ala Ala
50 55 60

Val Val Asp Thr His Arg Asp Val Val Tyr Leu Asn Glu Arg Ala Lys
65 70 75 80

Glu Leu Gly Leu Val Arg Asp Arg Gln Leu Asp Asp Gln Ala Trp Arg
85 90 95

Ala Ala Arg Gln Ala Leu Gly Gly Glu Asp Val Glu Ser Asp Leu Ser
100 105 110

Pro Arg Lys Arg Ser Ala Thr Gly Arg Ser Gly Leu Ser Val His Gly
115 120 125

His Ala Arg Leu Leu Ser Glu Glu Asp Arg Arg Phe Ala Val Val Phe
130 135 140

Val His Asp Gln Ser Asp Tyr Ala Arg Met Glu Ala Ala Arg Arg Asp
145 150 155 160

Phe Val Ala Asn Val Ser His Glu Leu Lys Thr Pro Val Gly Ala Met
165 170 175

Ala Leu Leu Ala Glu Ala Leu Leu Ala Ser Ala Asp Asp Ser Glu Thr
180 185 190

Val Arg Arg Phe Ala Glu Lys Val Leu Ile Glu Ala Asn Arg Leu Gly
195 200 205

Asp Met Val Ala Glu Leu Ile Glu Leu Ser Arg Leu Gln Gly Ala Glu
210 215 220

Arg Leu Pro Asn Met Thr Asp Val Asp Val Asp Thr Ile Val Ser Glu
225 230 235 240

Ala Ile Ser Arg His Lys Val Ala Ala Asp Asn Ala Asp Ile Glu Val
245 250 255

Arg Thr Asp Ala Pro Ser Asn Leu Arg Val Leu Gly Asp Gln Thr Leu
260 265 270

Leu Val Thr Ala Leu Ala Asn Leu Val Ser Asn Ala Ile Ala Tyr Ser
275 280 285

Pro Arg Gly Ser Leu Val Ser Ile Ser Arg Arg Arg Arg Gly Ala Asn
290 295 300

Ile Glu Ile Ala Val Thr Asp Arg Gly Ile Gly Ile Ala Pro Glu Asp
305 310 315 320

Gln Glu Arg Val Phe Glu Arg Phe Phe Arg Gly Asp Lys Ala Arg Ser
325 330 335

Arg Ala Thr Gly Gly Ser Gly Leu Gly Leu Ala Ile Val Lys His Val
340 345 350

Ala Ala Asn His Asp Gly Thr Ile Arg Val Trp Ser Lys Pro Gly Thr
355 360 365

Gly Ser Thr Phe Thr Leu Ala Leu Pro Ala Leu Ile Glu Ala Tyr His
370 375 380

Asp Asp Glu Arg Pro Glu Gln Ala Arg Glu Pro Glu Leu Arg Ser Asn
385 390 395 400

Arg Ser Gln Arg Glu Glu Glu Leu Ser Arg
405 410

<210> 21

<211> 227

<212> PRT

<213> *Mycobacterium bovis*

<220>

<223> Translation of nucleotides 1679-2362 of SEQ ID
NO:12, RegX3 amino acid sequence.

<400> 21

Met Thr Ser Val Leu Ile Val Glu Asp Glu Glu Ser Leu Ala Asp Pro
1 5 10 15

Leu Thr Phe Leu Leu Arg Lys Glu Gly Phe Glu Ala Thr Val Val Thr
20 25 30

Asp Gly Pro Ala Ala Leu Ala Glu Phe Asp Arg Ala Gly Ala Asp Ile
35 40 45

Val Leu Leu Asp Leu Met Leu Pro Gly Met Ser Gly Thr Asp Val Cys
50 55 60

Lys Gln Leu Arg Ala Arg Ser Ser Val Pro Val Ile Met Val Thr Ala
65 70 75 80

Arg Asp Ser Glu Ile Asp Lys Val Val Gly Leu Glu Leu Gly Ala Asp
85 90 95

Asp Tyr Val Thr Lys Pro Tyr Ser Ala Arg Glu Leu Ile Ala Arg Ile
100 105 110

Arg Ala Val Leu Arg Arg Gly Gly Asp Asp Asp Ser Glu Met Ser Asp
115 120 125

Gly Val Leu Glu Ser Gly Pro Val Arg Met Asp Val Glu Arg His Val

130

135

140

Val Ser Val Asn Gly Asp Thr Ile Thr Leu Pro Leu Lys Glu Phe Asp
145 150 155 160

Leu Leu Glu Tyr Leu Met Arg Asn Ser Gly Arg Val Leu Thr Arg Gly
165 170 175

Gln Leu Ile Asp Arg Val Trp Gly Ala Asp Tyr Val Gly Asp Thr Lys
180 185 190

Thr Leu Asp Val His Val Lys Arg Leu Arg Ser Lys Ile Glu Ala Asp
195 200 205

Pro Ala Asn Pro Val His Leu Val Thr Val Arg Gly Leu Gly Tyr Lys
210 215 220

Leu Glu Gly

225